Chapter 7

Intangible investment, innovation and digitalisation

The global innovation landscape is changing fast due to the growing importance of intangible assets and China

Share of R&D expenditures in 2018 and share of new leading R&D firms

- EU firms are among the global leaders in the automotive sector but the European Union is less present in the fast-growing sector of software and computer services.
- The EU generates relatively few new leading R&D firms. The new firms in the European Union come mostly from pharmaceuticals, biotechnology and the service sectors.

The European Union continues to lag the United States in the adoption of digital technologies; smaller firms are less likely to be digital

Adoption of digital technologies (in %), by sector

- The EU continues to lag the United States in digital adoption in 2020, 37% of EU firms have not implemented any digital technology, compared to 27% in the United States.
- The gap with the United States is particularly marked for the construction and service sectors, and for the adoption of technologies associated with internet of things.

The outbreak of COVID-19 has led to wider recognition of the importance of digital transformation

Investments to tackle the impact of weather events and to reduce carbon emissions (in %), by digital intensity

- Digital firms, especially those with multiple technologies, are more likely to invest to meet the challenges of climate change, such as preparing for extreme weather events and reducing their carbon emissions.
- EU firms tend to invest much more in these areas than US firms.

Digital firms are more likely to invest to meet the challenges of climate change, especially in the European Union

Long-term impact of COVID-19 (in %), by digital intensity

- The majority of digital firms expect digital technologies to become more important in the future.
- Digital firms report less often that the COVID-19 outbreak will lead to a permanent reduction in employment, especially in the United States.

Policy implications:

- Policymakers in the European Union should be concerned about the lack of investment in digital technologies by many EU firms, as the COVID-19 crisis is likely to exacerbate the digital divide between them and more technically savvy firms.
- To foster the green recovery and address the long-term impact of COVID-19, policies should strive to preserve a well-functioning, competitive and integrated EU market environment that will push firms to acknowledge the potential digital upside and invest more.
- For example, EU member states should create incentives to accelerate the digital transformation of SMEs – through targeted support and advisory, improve the digital skills of workers through training, and make it easier to finance investment in digital technologies.